

ACCESSION NR: AT4036057

tutes a coaxial copper chamber (inside and outside diameters 1.6 and 12.5 cm respectively, length 180 cm) placed in a homogeneous magnetic field that can be regulated from 0 to 20 A/m and in a radial electric field produced by capacitor bank of 1050 μF connected to the system through a discharge gap and six coaxial cables. The vacuum in the system was 1.33×10^{-4} n/m². Oscillograms were taken of the waveform of the plasma voltage, of the capacitor and short-circuit currents, of plasma-diamagnetism signals from a probe located in the working volume, and of the time dependence of the light, obtained with a photomultiplier. The results show that a plasma rotating in crossed electric and magnetic fields has many advantages over a plasma produced by other means. A rotating plasma can be retained for several hundred microseconds at densities on the order of 10^{15} cm⁻³ and high degree of ionization (~30%). The confinement time (650--1000 μsec) agrees well with the time of penetration of the magnetic field due to the azimuthal current through the chamber wall (~1000 μsec). It is therefore proposed that the plasma confinement

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time is determined under these conditions essentially by the time of penetration of the magnetic field through the chamber wall. If this factor turns out to be decisive, then the penetration time of the field can be increased by increasing the wall conductivity and the wall thickness. The former can be done by cooling the chamber, but the latter entails attenuation of the field at the chamber walls. Experiments are continuing in this direction since an estimate indicates that the penetration time of the magnetic field through the chamber wall can be increased by three orders of magnitude. Orig. art. has: 6 formulas and 6 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 21May64

ENCL: 01

SUB CODE: ME

NR REF SOV: 001

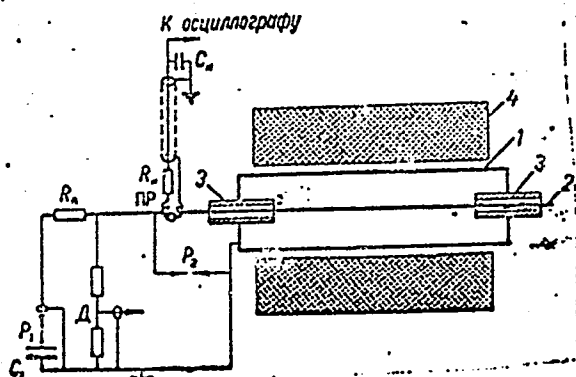
OTHER: 005

Card 3/4

ACCESSION NR: AT4036057

ENCLOSURE: 01

To oscilloscope



Schematic diagram of installation:
 1 - copper vacuum chamber, 2 -
 central rod, 3 - porcelain insulator,
 4 - solenoid producing a homogeneous
 magnetic field, P_1 , P_2 - discharge gap
 Π - voltage divider, ΠP - Rogowski
 loop, C_1 - capacitor bank, R_{Π} -
 limiting resistor, $R_{\text{int}} C_{\text{int}}$ - integ-
 rating network.

Card 4/4

ACCESSION NR: AT4036059

8/2781/63/000/003/0199/0206

AUTHORS: Volkov, Ya. F.; Tolok, V. T.; Krivoruchko, S. M.

TITLE: Plasma of Theta pinch in a magnetic grid

SOURCE: Konferentsiya po fizike plazmy* i problemam upravlyayemogo termoyadernogo sinteza. 3d, Kharkov, 1962. Fizika plazmy* i problemy* upravlyayemogo termoyadernogo sinteza (Plasma physics and problems of controlled thermonuclear synthesis); doklady* konferentsii, no. 3. Kiev, Izd-vo AN UkrSSR, 1963, 199-206

TOPIC TAGS: plasma pinch, plasma confinement, magnetic mirror, plasma stability, plasma decay, plasma physics

ABSTRACT: Experiments were set up to ascertain the confining ability of a magnetic grid without a longitudinal field, where the plasma is injected from the ends of the chamber. Another purpose of the experiment was to compare the stability and cleanliness of a

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Θ -pinch plasma with a peripheral field and without it. The experimental setup and the procedure are described. Measurement of the lifetime of the plasma with density above $6 \times 10^{13} \text{ cm}^{-3}$, and of the intensity of the peripheral field B_ϕ between neighboring conductors, at zero longitudinal field, made at a constant pressure of 13.3 n/m^2 , has shown that the confinement time increases from 20 to 70 microseconds as the field is increased from 0.5 to $24 \times 10^4 \text{ A/m}$. The existence is proportional to $B_\phi^{2/3}$. Superposition of the field of the magnetic grid on the Θ pinch apparently decreases the instability; the particles are lost predominantly through the magnetic gaps. The amount of impurity (from the walls) in the discharge decreases with increasing B_ϕ , and the amount of absorbed hydrogen released from the walls also increases. It is pointed out that the results of these experiments are still preliminary, in view of the small diameter of the chamber and the small values of the magnetic field. Orig. art. has: 6 figures.

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ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 21May64

ENCL: 02

SUB CODE: ME

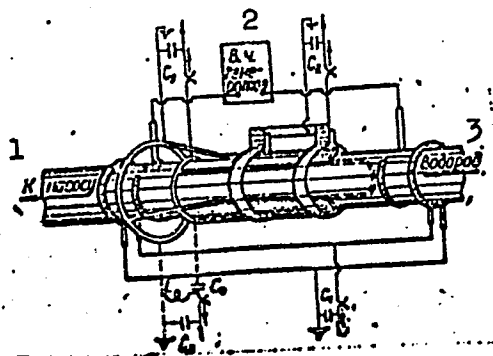
NR REF SOV: 005

OTHER: 003

Card 3/5

ACCESSION NR: AT4036059

ENCLOSURE: 01

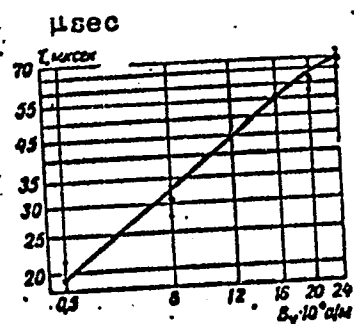


Theta-pinch plasma in a magnetic field

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ENCLOSURE: 02



Dependence of plasma lifetime on the magnetic field intensity in the gap.

Card 5/5

ACCESSION NR: AT4036061

S/2781/63/000/003/0211/0216

AUTHORS: Il'yenko, B. P.; Zy*kov, V. G.; Lats'ko, Ye. M.; Tolok, V. T.

TITLE: Measurement of the twist angle and turning angle of a force line in a system with a helical magnetic field

SOURCE: Konferentsiya po fizike plazmy* i problemam upravlyayemogo termoyadernogo sinteza. 3d, Kharkov, 1962. Fizika plazmy* i prob-
lemy* upravlyayemogo termoyadernogo sinteza (Plasma physics and
problems of controlled thermonuclear synthesis); doklady* konfer-
entsii, no. 3. Kiev, Izd-vo AN UkrSSR, 1963, 211-216

TOPIC TAGS: magnetic mirror, plasma confinement, magnetic field,
magnetic pinch, plasma magnetic field interaction, electron beam,
charged particle motion

ABSTRACT: The work described is a continuation of earlier experi-

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ACCESSION NR: AT4036061

ments on the confinement of plasma in traps of the stellarator type (ZhTF v. 31, 1289, 1961 and v. 32, 1190, 1962). The paper is devoted to an experimental investigation of the twist angle and turning angle in systems with helical magnetic fields, using a vacuum chamber 9 cm in diameter and 140 cm long (straight copper tube). The longitudinal magnetic field was produced by 12 single-layer coils and had a maximum in the axial direction of 3.4×10^4 A/m. The charged particles were confined in the stellarator by external magnetic field in which each force line was gradually wrapped around the axial line of the chamber. The twist angle of the force lines were measured with the aid of a rotating electron gun, the construction of which is described elsewhere (ZhETF, v. 32, 1190, 1962). The measurement results were compared (in an axial magnetic field 3.4×10^4 A/m and at a current of 440 A) with the theoretical formula. The force-line rotation angle was measured on the curved section of the stellarator model in a longitudinal magnetic field 7.2×10^4 A/m and at a current of 1100 A in the coil. The measurements

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have shown that the angular rotation of the beams on the external side of the curvilinear section is larger than on the external side. This difference does not affect the motion of the particles in the closed system, since the average turning angle remains the same and depends only on the radius. The measurement results showed satisfactory agreement with the calculated data. Orig. art. has: 7 figures and 2 formulas.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 21May64

ENCL: 02

SUB CODE: ME

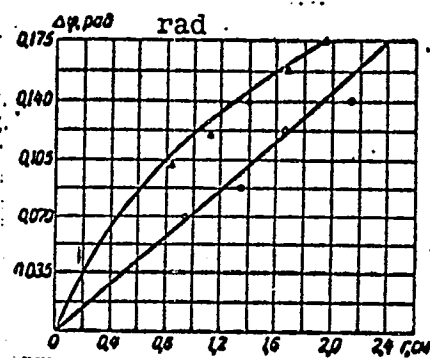
NR REF SOV: 004

OTHER: 000

Card 3/5

ACCESSION NR: AT4036061

ENCLOSURE: 03

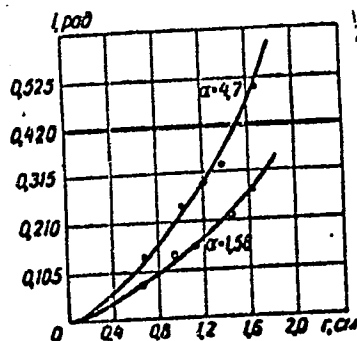


Dependence of twist angle on the radius

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ENCLOSURE: 02

ACCESSION NR: AT4036061



Dependence of turning angle on the radius

Card 5/5

TOLOKA, V.

Drive for quality. Mashinostroitel' no.3:40-41 Mr '64.
(MIRA 17:4)

TOLOKA, V.I.

Green light to pneumatic and hydraulic drives. Mashinostroitel'
no.4:10-11 Ap '63. (MIRA 16:5)
(Oil-hydraulic machinery) (Pneumatic machinery)

TOLOKH, S.I. (s.Zhuravno, L'vovskoy oblasti, ul.Shkol'naya, d.4)

Invagination of the jejunum simulating gastric hemorrhage. Klin.
khir. no.7:77-78 J1 '62. (MIRA 15:9)

1. Zhuravnovskaya uchastkovaya bol'nitsa, Zhidachevskogo rayona,
L'vovskoy oblasti.
(GASTROINTESTINAL HEMORRHAGE)(INTESTINES--INTUSSUSCEPTION)

TOLOKH, S.I.

First aid in fractures of the humerus. Fel'd. i akush. 28
no.3:21-24 Mr'63. (MIRA 16:7)

1. Iz Zhuravenskoy uchastkovoy bol'nitsy Zhidachevskogo rayona
L'vovskoy oblasti.

(HUMERUS—FRACTURE)

(FIRST AID IN ILLNESS AND INJURY)

TOLOKH, S.I.

Instrument set for intraarterial blood transfusion. Vrach.
delo no.12:121 D '63. (MIRA 17:2)

1. Zhuravenskaya uchastkovaya bol'nitsa Zhidachevskogo
rayona L'vovskoy oblasti.

TOLOKH, S.I. (s.Zhuravno, L'vovskoy oblasti)

"Closed lesions of the spine" by Z.B.Bazilevskaia. Ortop.,
travm. i protez. 24 no. 4:80-83 Ap'63. (MIRA 16:8)
(SPINE—WOUNDS AND INJURIES)
(BAZILEVSKAIA, Z.B.)

TOLOKH, S.I.

Primary suturing of the urethra in pelvic fractures. *Klin. khir.*
no.1367-68 '65. (MIRA 18:8)

1. Zhuravnovskaya uchastkovaya bol'nitsa, Zhidachevskogo rayona,
L'vovskoy oblasti.

TOLOKIYEVA, A. Z.

Cand Med Sci - (diss) "Action of yellow, pontium, and daursk rhododendrons on the cardiovascular system." Omsk, 1961. 15 pp; (Omsk State Med Inst imeni M. I. Kalinin); 250 copies; price not given; (KL, 6-61 sup, 241)

TOLOKNEVA, A.Z.; ZVEREVA, A.V.

Pharmacology of Japanese elecampane. Trudy Khab.med.inst. no.20:201-
206 '60. (MIRA 15:10)

1. Iz kafedry farmakologii (zav. dotsent K.V.Drake) Khabarovskogo
meditsinskogo instituta.

(ELECAMPANE)

TELESHEV, V.I., inzh.; PINIGIN, M.I., inzh.; TOLOKNO, N.V., inzh.

Passage of the spring ice flow through the Mamakan Hydroelectric
Power Station. Gidr. stroi. 31 no.7:31-35 J1 '61. (MIRA 14:7)

(Mamakan Hydroelectric Power Station--Ice on rivers, lakes, etc.)

TOLOKNOV, O.A., kand.tekhn.nauk; NITUSOV, Yu.Ye., kand.tekhn.nauk; REKUS,
G.G., kand.tekhn.nauk; CHIRKOV, M.T., inzh.

An a.c.drive system for driving wheels of an automobile train.
Izv.vys.ucheb.zav.; mashinostr. no.7:133-136 '63. (MIRA 16:11)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.

TOLOKNOV, O. A., kand. tekhn. nauk; BOCHAROV, N. F., kand. tekhn. nauk; KRADINOV, Ye. B.; SEMENOV, V. M., kand. tekhn. nauk

Possible use of an electric drive in heavy automobile trains.
Avt. prom. 28 no.6:29-32 Je '62. (MIRA 16:4)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche im.
Baumana i Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo
Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy
institut.

(Automobile trains---Electric driving)

ACC NR: AP7006718

(A)

SOURCE CODE: UR/0113/66/000/012/0029/0031

AUTHOR: Baranov, Ye. N.; Bocharov, N. F. (Candidate of technical sciences); Semenov, V. M. (Candidate of technical sciences); Toloknov, O. A. (Candidate of technical sciences); Boshnyak, V. A.; Makarov, S. G.; Boldarev, T. A.

ORG: MWTU im. Bauman; NAMI; Moscow Electric Machine Building Plant (Moskovskiy elektromashinostroitel'nyy zavod)

TITLE: Design of a motorized wheel with electric drive for installation in pneumatic tires on automotive vehicles

SOURCE: Avtomobil'naya promyshlennost', no. 12, 1966, 29-31

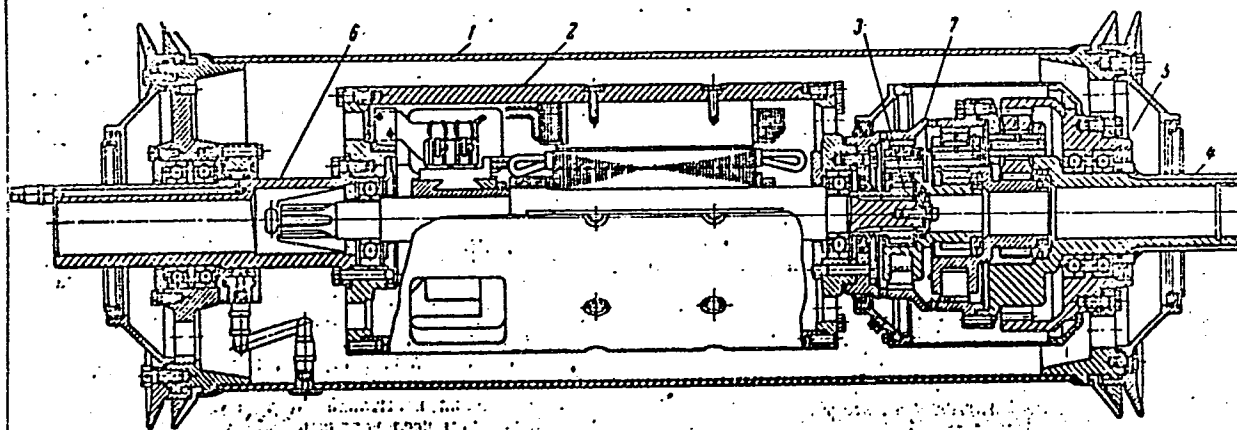
TOPIC TAGS: vehicle power transmission system, tire, vehicle engineering, drive train

ABSTRACT: The authors describe a motorized wheel developed in the "wheeled vehicles" department of the Moscow Technical College im. Bauman for installation in the I-245 pneumatic tire. This tire is 1000 mm in diameter and 1000 mm wide with a 305 mm mounting hole. A diagram of the motorized wheel is shown in the figure. The power assembly of the unit is located inside the rim 1 of the tire which is a tube with welded flanges. The power assembly consists of electric motor 2 and speed reducer 3. A DI-33K DC electric traction motor is used with a power of 16 kw at 220 volts. The

UDC: 629.113-585.3

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ACC NR: AP7006718



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ACC NR: AP7006718

rated speed of the motor is 4000 rpm with a maximum of 6000 rpm. The unit is 238 mm in diameter and weighs 106 kg. The speed reducer has 3 rows of planetary gears with a transmission ratio of 31.2. This type of speed reducer has the lowest weight and size for a given transmission ratio and efficiency. Orig. art. has: 2 figures, 1 table, 7 formulas.

SUB CODE: 13 / SUBM DATE: None/ ORIG REF: 005

Card

3/3

LAR'KINA, Yekaterina Ivanovna; PETROV, L., red.; TOLOKNOVA, M., mladshiy
red.; ULANOVA, L., tekhn.red.

[Training of collective-farm personnel during the period of mass
collectivization] Podgotovka kolkhoznykh kadrov v period massovoi
kollektivizatsii. Moskva, Izd-vo sots.-ekon.lit-ry, 1960. 165 p.
(MIRA 13:5)

(Collective farms)

ROSTOVTSEV, N.; DOBRYNIN, P.; TIKHOMIROV, V.; LOGACHEV, A.; SHAKUN, V.;
GRUDEV, D.; KUDRYAVTSEV, P.; MALEYEV, M.; SOKOV, N.; KORNIKOV, V.;
TOLOKONNIKOV, A.; PUSTOVALOV, A.; RED'KIN, A.; BLOMEVIST, M.;
PETROV, N.; SHUBSKIY, I.; SEMENOV, S.; POPOV, G.; BRODOV, K.;
KORENEV, P.

Professor M.N. Iakovlev; obituary. Zhivotnovodstvo 19 no.12:90
D '57. (MIRA 10:12)
(Iakovlev, Mitrofan Nikolaevich, 1878-1957)

TOLOKOL'NIKOV, G., polkovnik v otstavke

A living participant of a battle. Voen.-znan. 41 no.12:6-7
D '65. (MIRA 18:12)

TOLOKOL'NIKOV, Grigoriy Abramovich, staryy kommunist, polkovnik zapasa

Lenin has lighted our way. Voen.vest. 39 no.4:23-25 Ap '60.

(MIRA 14:2)

(Lenin, Vladimir Il'ich, 1870-1924)

KEKKELEV, L.; TOLOKONNIKOV, I.

Notes of a naturalist. IUn.nat. no.5:38-39 My '62. (MIRA 15:7)
(Birds---Behavior)

TOLOKONNIKOV, I.V. (Moskva)

August in the forest. Priroda 50 no.8:126 Ag '61.
(Summer)

(MIRA 14:7)

AZOS, S.; AREF'YEV, A.; ARTAMONOV, I.; BABINA, I.; BEREZOVSKIY, V.; BLOZHKO, V.;
BRAVERMAN, A.; BYKHOVSKIY, Yu.; VINOGRADOVA, M.; GALANKINA, Ye.;
GIL'DENGERSH, F.; GLOBA, T.; GREYVER, N.; GORDON, G.; GUL'DIN, I.;
GULYAYEVA, Ye.; GUSHCHINA, I.; DAVYDOVSKAYA, Ye.; DAMSKAYA, G.;
DERKACHEV, D.; YEVDOKIMOVA, A.; YEGUNOV, V.; ZABELYSHINSKIY, I.;
ZAYDENBERG, B.; AZMOSHNIKOV, I.; ITKINA, S.; KARGHEVSKIY, V.;
KLUSHIN, D.; KUVINOV, Ye.; KUZNETSOVA, G.; KURSHAKOV, I.;
LAKERNIK, M.; LEYZEROVICH, G.; LISOVSKIY, D.; LOSKUTOV, F.;
MALEVSKIY, Yu.; MASLIYANITSKIY, I.; MAYANTS, A.; MILLER, L.;
MITROFANOV, S.; MIKHAYLOV, A.; MYAKINENKOV, I.; NIKITINA, I.;
NOVIN, R.; OGNEV, D.; OL'KHOV, N.; OSIPOVA, T.; OSTRONOV, M.;
PAKHOMOVA, G.; PETEKER, S.; FLAKSIN, I.; PLETENEVA, N.; POPOV, V.;
PRESS, Yu.; PROKOF'YEVA, Ye.; PUCHKOV, S.; REZKOVA, F.; RUMYANTSEV, M.;
SAKHAROV, I.; SOBOL', S.; SPIVAKOV, Ya.; STRIGIN, I.; SPIRIDONOVA, V.;
TIMKO, Ya.; TITOV, S.; TROITSKIY, A.; TOLOKONNIKOV, K.; TROFIMOVA, A.;
FEDOROV, V.; CHIZHIKOV, D.; SHEYN, Ya.; YUKHTANOV, D.

Roman Lazarevich Veller; an obituary. TSvet. met. 31 no.5:78-79
My '58. (MIRA 11.)

(MIRA 11:6)

(Veller, Roman Lazarevich, 1897-1958)

1427. Tolukankar, S. A. Photo determinations of drug loading

TOLOKONNIKOVA, Ye.V.

Some morphological and biochemical characteristics of
eggs as related to the age and breed of hens. Trudy
Inst. gen. no.33:109-118 '65. (MIRA 18:12)

TOLOKH, S. I. (Zhuravno L'vovskoy oblasti)

Fractures of the pelvic bones and first aid. Pel'd. 1 akush. 27
no.5:18-20 My '62. (MIRA 15:7)

(FIRST AID IN ILLNESS AND INJURY)
(PELVIS--FRACTURE)

Country : USSR

Category: Pharmacology. Toxicology. Medicinal Plants.

V

Abs Jour: RZhBiol., No 6, 1959, No 27863

Author : Drake, K.V.; Kiryutina, V.I.; Zvereva, A.V.;
Tolokneva, A.Z.

Inst : Khabarovsk Medical Institute

Title : On the Pharmacology of Laminaria.

Orig Pub: Tr. Khabarovskogo med. in-ta, 1957, sb. 15, 78-83

Abstract: Infusions and tinctures of Japanese Laminaria (I) in dilutions of 1:30 - 1 : 200 increase the contractions of isolated intestine of rabbit. I removes the paralyzing action of atropine and adrenalin on the intestines, but does not remove the effect of papaverine. In subcutaneous and intravenous

Card : 1/2

Country : USSR

Category: Pharmacology. Toxicology. Medicinal Plants.

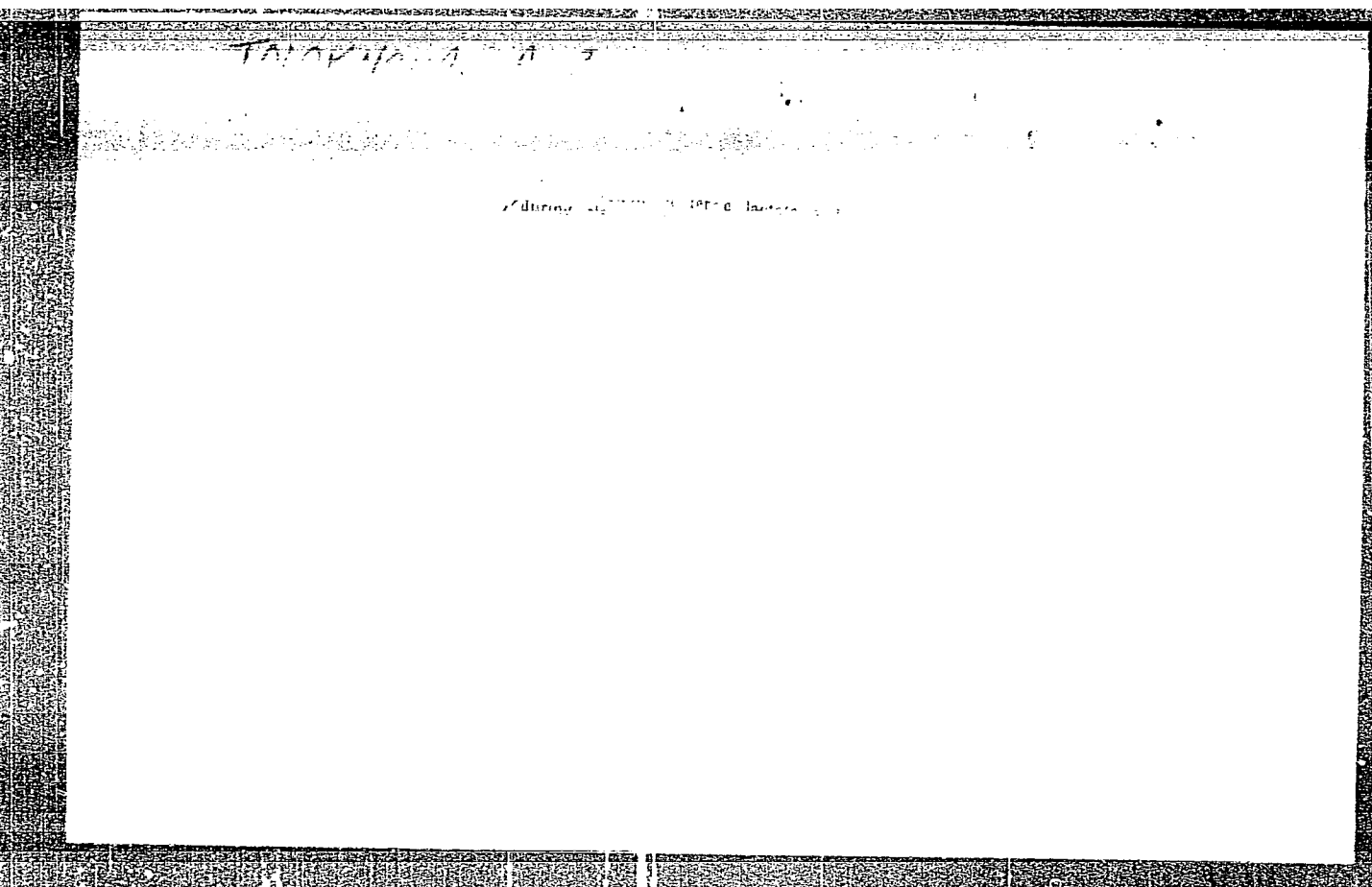
V

Abs Jour: RZhBiol., No 6, 1959, No 27863

introduction, I decreases arterial pressure. I
increases the amplitude of cardiac contractions
and dilates the vessels of isolated ear of rabbit.
From the author's resume.

Card : 2/2

V-45



TOLOKNEVA, A.Z.

Effect of various species of Rhododendron on the heart. Farm.
i toks. 19 no.1:39-45 Ja-I' '56. (MLRA 9:5)

1. Kafedra farmakologii (zav.-dotsent K.V. Drake) Khabarovskogo
meditsinskogo instituta i otdel farmakologii (zav.-prof. A.D.
Turova) Vsesoyuznogo nauchno-issledovatel'skogo instituta lekarstvennykh
i aromaticeskikh rasteniy.
(CARDIAC GLYCOSIDES,
Rhododendron (Rus))

TOLOKNEVA, A.Z.

Effect of Rhododendron preparations on experimental cardiovascular
insufficiency in dogs. Farm.i toks. 23 no.1:42-45 Ja-F '60.

(MIRA 14:3)

1. Kafedra farmakologii (zav.-dotsent K.V.Drake) Khabarovskogo gosudar-
stvennogo meditsinskogo instituta.

(CARDIOVASCULAR SYSTEM--DISEASES)

(RHODODENDRON)

TOLOKNO, A.F.

579 Otkorm svinney v kolkhoze Shlyakh do komunizma. /Borispol'skiy rayon
Kievskoy obl. / M., Goskul'tirosuetizdat, 1954. 16 s. s ill. 22sm.
! (Vsesoyue. s.-kh Vystavka). 5.000 ekz. 15k. -Na dol avt. ne
ykazan- /54.54693/p 636.4084st (47.711)

SO: Knizhnaya Letopis, Vol. 1, 1955

TOLOKNOV, L.M.

General-use instruments with a scale angle of 240° . Inform.-tekhn.
sbor. MEP no.8:40-48 '58. (MIRA 12:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektromyshlennosti.
(Electric meters)

TOLOKNOV, N.

Moving-picture Projectors

Improve the inspection and assembly of equipment. Kinomekhanik no. 1, 1953

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.

TOLOKNOV, O.A., kand. tekhn. nauk; REKUS, G.G., kand. tekhn. nauk;
CHIRKOV, M.T., inzh.

Gas-turbine a.c. traction drive system. Elektrotehnika 34
no.11:44-49 N '63. (MIRA 17:2)

8(5)

AUTHORS:

Toloknov, O.A., Chirkov, M.T., and Yerokhin, I.A.

SOV/159-58-3-9/31

TITLE:

A Generator - Motor System With Magnetic Amplifiers

PERIODICAL:

Nauchnyye doklady vysshey shkoly, Mashinostroyeniye i priborostroyeniye, 1958, Nr 3, pp 58-61 (USSR)

ABSTRACT:

For a number of production devices it is desirable to have an electric drive with an even wide control range. The generator-motor system satisfies this requirement. However, the normal generator-motor system does not provide different mechanical characteristics. This may be obtained by a complicated and uneconomical addition of auxiliary motors and devices. The generator-motor system suggested by the authors provides a wide and even range of rpm control for different mechanical characteristics. Prior to considering the generator - motor system with a magnetic amplifier, the authors point out some peculiarities of generator-motor systems with series excitation. They mention the complicated equipment required and that continuous motor speed control is of the

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A Generator - Motor System With Magnetic Amplifiers SOV/159-58-3-9/31

order 1:10 by reducing the magnetic current in the motor and in the generator. Further, they point out the disadvantages of such a system. For eliminating these disadvantages and for providing a control range of 1:50, the authors suggest a generator-motor system with a magnetic amplifier as shown in figure 2. In a generator-motor system, having series excitation, residual magnetism currents are of great influence at loads close to zero. These residual magnetism currents are compensated in the system suggested by the authors. The suggested generator-motor system with a magnetic amplifier was tested on a low-power machine PI-45, operating at 110 volts, 28.2 amps, 2.5 kw, 1,000 rpm. The application of magnetic amplifiers provides the possibility obtaining different mechanical characteristics and regulating the motor speed by means of potentiometers. There are

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A Generator - Motor System With Magnetic Amplifiers SOV/159-58-3-9/31

1 circuit diagram, 5 graphs and 4 Soviet references.
This article was presented by the
Kafedra "Elektrotehnika i elektrooborudovaniye"
Moskovskogo vysshego tekhnicheskogo uchilishcha imeni
Baumana (Chair "Electrical Engineering and Electrical
Equipment" of the Moscow Higher Technical School imeni
Baumana;

SUBMITTED: March 13, 1958

Card 3/3

ACC NR: AP6035649

SOURCE CODE: UR/0280/66/000/005/0149/0152

AUTHOR: Toloknov, V. I. (Moscow)

ORG: none

TITLE: One problem in the analytical design of an optimal regulator

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 5, 1966, 149-152

TOPIC TAGS: automatic control theory, optimal control, control system stability

ABSTRACT: The solution of the problem concerning the analytical design of an optimal regulator in closed form is considered. Equations are presented for computing the parameters of the optimum control law and of the weighting coefficients of a quadratic functional according to data on the parameters of the system, the initial perturbations and the properties of the desired transient process. The stationary linear system whose motions satisfies the following differential equations is considered:

$$\begin{aligned}\dot{\eta}_1 &= \eta_2, \\ \dot{\eta}_2 &= b_{21}\eta_1 + b_{22}\eta_2 + m\xi, \\ \dot{\xi} &= h\sigma.\end{aligned}$$

In the above, $\eta = \eta_1$ and η_2 are phase coordinates which determine the state of the sys-

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ACC NR: AP6035649

tem; b_{21} , b_{22} and m are known coefficients which characterize the system; ξ is the coordinate of the control organ; $h > 0$ is an assigned number which characterizes the slope of the servomotor speed characteristic; σ is the control signal fed to the servomotor. Within certain specified limitations, a control law is selected such that there is asymptotic stability in the closed system with respect to initial perturbations and such that the function now assumes a minimum value during all motions of the system. The Lyapunov-Bellman method is used to obtain the control law. The control law together with the initial equation are used to formulate a differential equation for the closed control system with respect to the coordinate η_1 . The minimum value of the functional is computed from the weighting coefficients. The determination of the weighting coefficients is reduced to a special algebraic problem. Orig. art. has: 32 formulas.

SUB CODE: ~~127~~^{13, 14} / SUBM DATE: 06Feb65/ ORIG REF: 002

Card 2/2

TOLOKOL'NIKOV, G., gvardii polkovnik zapasa

General Dovator; on his 60th birthday. Voen. znam. 39 no.3:8
Mr '63. (MIRA 16:7)

(Dovator, Lev Mikhailovich, 1903-)

TOLOKNOVA, Ye. A., Cand of Med Sci -- (diss) "Investigation of the contents of hormones of the ~~ADRENAL~~ cortex of the suprarenal glands during the treatment of patients suffering with a cardial form of rheumatism." Moscow, 1957, 11 pp (Institute of Therapy, Academy of Medical Sciences USSR), 200 copies (KL, 32-57, 98)

FOTEYEVA, M.N.; SUL'YE, Ye.V.; TOLOKNOVA, Ye.A.; NESTEROVA, A.P.; MAYSIKOV, A.L.,
professor, deyствitel'nyy chlen Akademii meditsinskikh nauk SSSR, direktor.

Rate of blood flow in hypertension determined with radioactive sodium.
Terap.arkh. 25 no.3:7-14 My-Je '53. (MLBA 6:9)

1. Institut terapii Akademii meditsinskikh nauk SSSR.
(Hypertension) (Radioactive tracers)

TOLOKNOVA, Ye.A.

Investigations on adrenal cortex hormones in rheumatic heart disease and their relation to hormone therapy. Terap. arkh. 27 no.8:68-73 '55. (MLRA 9:5)

1. Iz Instituta terapii (dir.-deystvitel'nyy chlen AMN SSSR prof. A.L. Myasnikov) Akademii meditsinskikh nauk SSSR.

(RHEUMATIC HEART DISEASE, therapy,
ACTH, eff. on blood & urine adrenal cortex hormones)

(BLOOD

adrenal cortex hormones, eff. of ACTH in ther. of
rheum. heart dis.)

(ACTH, therapeutic use,
rheum. heart dis., eff. on blood & urine adrenal cortex
hormones)

(URINE

adrenal cortex hormones, eff. of ACTH in ther. of rheum.
heart dis.)

(ADRENAL CORTEX, hormones,
in blood & urine, eff. of ACTH ther. of rheum. heart
dis.)

TOLOKONNIKOV, B.P., inzh.

Introduced in the Yaroslavl Economic Region. Izobr. v SSSR 3 no.3:
15-16 Mr '58. (MIRA 11:3)
(Yaroslavl Province--Efficiency, Industrial)

TOLOKONNIKOV, B.V., prof.

Mechanism of pupil reaction to a sound stimulus. Trudy gos.
nauch.-issl.inst.ukha, gorla i nosa. 6:251-261 '55.
(MIRA 12:10)

1. Iz otdela fiziologii (zav. - prof. N.V.Timofeyev) Gosudar-
stvennogo nauchno-issledovatel'skogo instituta ukha, gorla i
nosa.

(PUPIL (EYE)) (SOUND--PHYSIOLOGICAL EFFECT)

TOLOKONNIKOV, B.V.; UR'YEVA, F.I.

Vestibular disorders in hardness of hearing. Trudy gos.
nauch.-issl. inst. ukha, gorla i nosa no.11:269-274 '59.
(MIRA 15:6)

1. Iz otdela patofiziologii Gosudarstvennogo nauchno-
issledovatel'skogo instituta ukha, gorla i nosa.
(DEAFNESS) (VESTIBULAR APPARATUS) (VERTIGO)

TOLOKONNIKOV, B.V.

(Deceased)

Physiology

See ILC

TOLOKOL'NIKOV, G., polkovnik zapasa

In the "Sports and Technology" defense organization. Voen. znan.
35 no.11:12 H '59. (MIRA 12:12)
(Germany, East--Military education)

TOLOKOL'NIKOV, G.

National here. Voen.znan. 32 no.1:27 Ja '56. (MLRA 9:5)
(Parkhomenko, Aleksandr Iakovlevich, 1885-1921)

TOLOKOL'NIKOV, G. G. Krasnogorsk: Moskovskoy oblasti.

First successes. Voen.znan.31 no.7:8 J1'55. (MLRA 8:12)
(Krasnogorsk--Military education)

TOLOKONNIKOV, I.

Recent settlers. IUn.mat. no.4:24-25 Ap '60.
(MIRA 13:6)
(Wild life, Conservation of)

TOLOKONNIKOV, L.A.

CAND PHYSICOMATH SCI

Dissertation: "Concerning the Influence of Material Compressibility on the Stability of Plates and Shells Beyond the Limit of Elasticity."

23 June 49

Sci Res Inst of Mechanics, Moscow Order of Lenin State V imeni M.V. Lomonosov.

SO Vecheryaya Moskva
Sum 71

TOLOKONNIKOV, L. A.
USSR/Mathematics - Nonlinear elasticity theory

FD-954

Card 1/1 Pub 85-8/11

Author : Tolokonnikov, L. A. (Rostov)

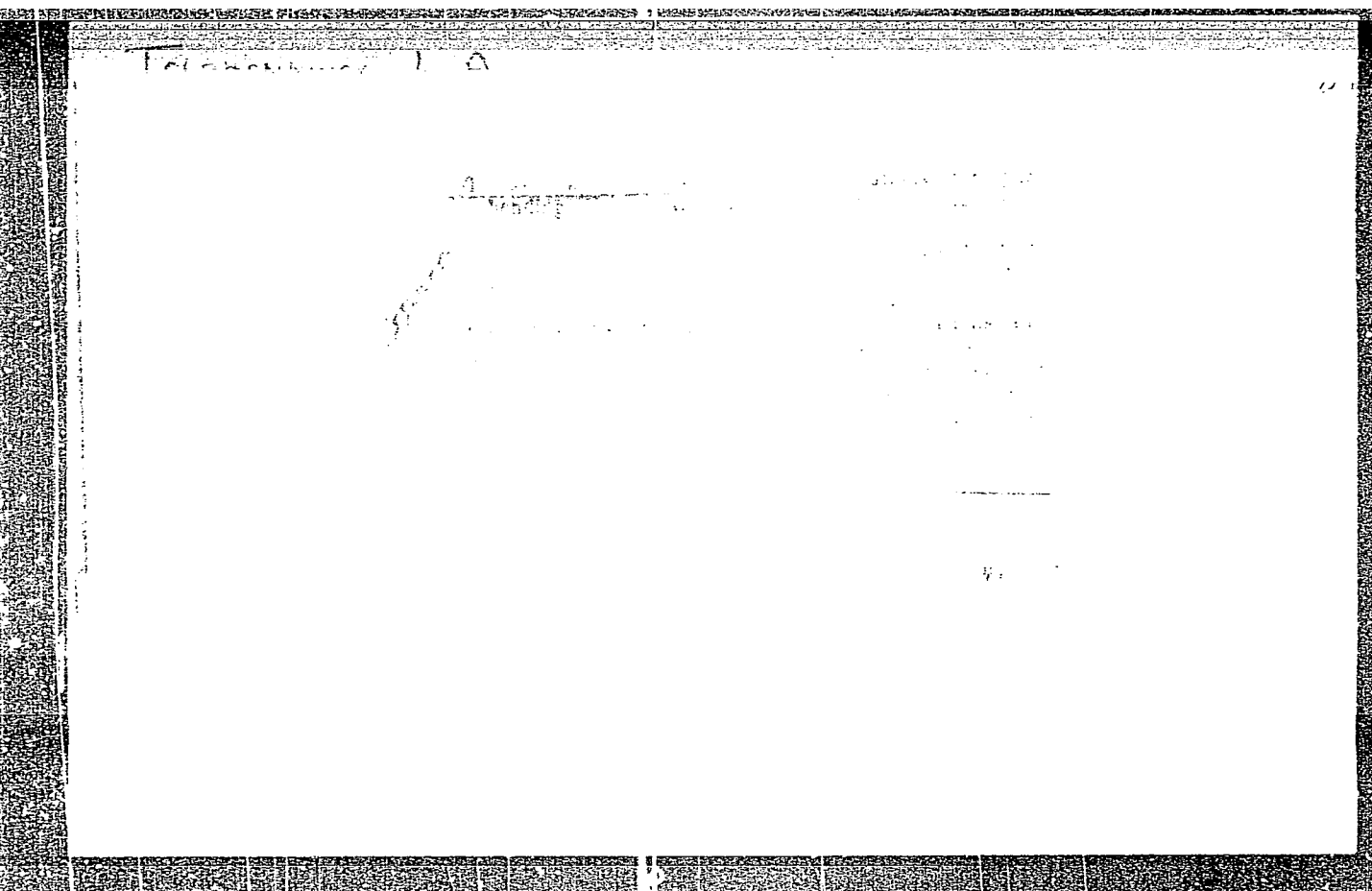
Title : Finite symmetrical deformations of a strip

Periodical : Prikl. mat. i mekh. 18, 619-626, Sep/Oct 1954

Abstract : Symmetrical deformation of a strip bounded by circular arcs and sections of radii is analyzed. The external forces are assumed at constant direction to the radial and tangential stresses in each point of the strip. The geometrical conditions of joint deformation and the equilibrium equation are reduced to a single differential equation in which the stress components are the desired function and argument. As an example, a problem of the two-dimensional stress of a plate is solved. One reference.

Institution : --

Submitted : January 26, 1954



TOLOKONNIKOV, L. A.

GROMOV, V.G. (Tula); TOLOKONNIKOV, L.A. (Tula)

Calculation of approximations in the problem of finite plane
deformations of a noncompressible material. Izv. AN SSSR Otd.
tekh. nauk. Mekh. i mashinostr. no.2:81-86 Mr-Ap '63.
(MIRA 16:6)

(Deformations(Mechanics))

TOLOKONNIKOV, L.A.

Some properties of correlations in the nonlinear theory of
elasticity. Nauch.trudy Tul.gor.inst. no.3:3-27 '61.
(MIRA 16:4)

(Elasticity)

TOLOKONNIKOV, L.A.

Variational equation for the problem of stability in a state of
equilibrium. Nauch.trudy Tul.gor.inst. no.3:27-37 '61.
(MIRA 16:4)

(Calculus of variations)
(Deformations (Mechanics))

TOLOKONNIKOV, L.A.

Significant deformations of an axisymmetric shell. Nauch.trudy
Tul.gor.inst. no.3:38-44 '61. (MIRA 16:4)
(Deformations (Mechanics))

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics,
Moscow, 27 Jan - 3 Feb '60.

To L. A. N. V. K. O. V. L. A.

269. L. A. N. V. K. O. V. L. A. (Moscow): Strain design and general stability of structures.
270. L. A. N. V. K. O. V. L. A. (Moscow): A general method of solving non-linear problems of structural mechanics.
271. L. A. N. V. K. O. V. L. A. (Moscow): A contribution to the non-linear problem of plate flutter.
272. L. A. N. V. K. O. V. L. A. (Moscow): On the use of the method of the finite element in the approximate solution of some problems of plastic equilibrium.
273. L. A. N. V. K. O. V. L. A. (Moscow): Experimental investigation of the influence of the shape of the hole on the stress concentration in the vicinity of the hole in a plate under tension.
274. L. A. N. V. K. O. V. L. A. (Moscow): Strength and viscoplastic flow of metals.
275. L. A. N. V. K. O. V. L. A. (Moscow): The relation between pore pressure and rate of creep of alloys.
276. L. A. N. V. K. O. V. L. A. (Moscow): Plastic strains of non-linearly deformed bodies.
277. L. A. N. V. K. O. V. L. A. (Moscow): Plasticity of metals by a spherical punch considering contact friction.
278. L. A. N. V. K. O. V. L. A. (Moscow): An approximate method of calculating residual stresses of variable sign at high speeds of rotation.
279. L. A. N. V. K. O. V. L. A. (Moscow): Application of similarity methods to the analysis of the flow of rubber compounds.
280. L. A. N. V. K. O. V. L. A. (Moscow): Dependence of the maximum elastic and discontinuous strains of aluminum alloys on strain rate.
281. L. A. N. V. K. O. V. L. A. (Moscow): An asymptotic method for the solution of boundary value problems.
282. L. A. N. V. K. O. V. L. A. (Moscow): Some problems of soil dynamics.
283. L. A. N. V. K. O. V. L. A. (Moscow): The flow in the boundary layer of an elastic, viscoplastic medium.
284. L. A. N. V. K. O. V. L. A. (Moscow): Some problems concerning the analysis of stresses in a thin film.
285. L. A. N. V. K. O. V. L. A. (Moscow): On strength and failure criteria for metals in the presence of stress concentrations.
286. L. A. N. V. K. O. V. L. A. (Moscow): Some problems of thin-layer shells.
287. L. A. N. V. K. O. V. L. A. (Moscow): Analogy and model methods in problems of structural mechanics concerning bars and thin-walled structures.
288. L. A. N. V. K. O. V. L. A. (Moscow): The problem of seismic strength of rigid supports of hydraulic structures.
289. L. A. N. V. K. O. V. L. A. (Moscow): Application of integral equations to the solution of some problems concerning an elastic wedge.
290. L. A. N. V. K. O. V. L. A. (Moscow): Deformations of plastic clays in shearing.
291. L. A. N. V. K. O. V. L. A. (Moscow): Elastic-plastic equilibrium of an elastic granular wedge.
292. L. A. N. V. K. O. V. L. A. (Moscow): Stability and vibrations of orthotropic plates of variable thickness.
293. L. A. N. V. K. O. V. L. A. (Moscow): Extensional vibrations of curved discs.
294. L. A. N. V. K. O. V. L. A. (Moscow): On the possibility of controlling the Kármán and flutter-dance modes of a plate.
295. L. A. N. V. K. O. V. L. A. (Moscow): Some problems concerning the bending of plates and shells with stiffeners.
296. L. A. N. V. K. O. V. L. A. (Moscow): On the effect of a wave on a heavy rigid sphere embedded in an elastic medium.
297. L. A. N. V. K. O. V. L. A. (Moscow): Some problems concerning rock formation and hydraulic fracturing.
298. L. A. N. V. K. O. V. L. A. (Moscow): Present state and problems of the theory of the flow of granular media.
299. L. A. N. V. K. O. V. L. A. (Moscow): Flow conditions for selected media.
300. L. A. N. V. K. O. V. L. A. (Moscow): Experimental study of real and apparent friction in vibrating cells.
301. L. A. N. V. K. O. V. L. A. (Moscow): On the construction of Green's functions for the equilibrium problem of shallow shells.
302. L. A. N. V. K. O. V. L. A. (Moscow): Further development of the initial boundary value problem.
303. L. A. N. V. K. O. V. L. A. (Moscow): Temperature stresses in multilayer plates and their effect on stiffness.

TOLOKONNIKOV, L. A.: Doc Phys-Math Sci (diss) -- "Some problems in the nonlinear theory of elasticity". Tula, 1958. 10 pp (Min Higher Educ USSR, Tula Mining Inst) (KL, No 13, 1959, 99)

TOLOKONNIKOV, L.A. (Tula).

Critical pressures on circular plates. Izv. AN SSSR. Otd. tekhn. nauk
no.10:77-86 0 '58.
(Elastic plates and shells) (MIRA 11:12)

TOLOKONNIKOV, I.A. (Tula)

Finite plane deformations of an incompressible material. Prikl.
mat. i mekh. 23 no.1:146-158 Ja-F '59. (MIRA 12:2)
(Deformations (Mechanics))

AUTHOR: Tolokonnikov, L. A. 20-119-6-19/56

TITLE: Plane Deformation of an Incompressible Material
(Ploskaya deformatsiya neszhimayemogo materiala)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6,
pp. 1124-1126 (USSR)

ABSTRACT: The position of the points of the body in its natural state are determined by the Cartesian coordinates x_1, x_2, x_3 . Let the displacement vector of the particle consist of the components $u_1(x_1, x_2), u_2(x_1, x_2), u_3 = 0$. Then it is possible to determine the deformation state of the surroundings of the point by the components of the tensor (ϵ_{ik}) and of the vector $\vec{\omega}$, of which only $\epsilon_{11}, \epsilon_{22}, \epsilon_{12}$ and ω_3 can differ from zero. At first equations for the rotation in the vicinity of the point are given. Then expressions are derived for the phase and the intensity of deformation. The compatibility conditions for the displacements reduce to a here given

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Plane Deformation of an Incompressible Material

20-119-6-19/56

system of equations. The non-linear equations for the equilibrium are written down in a generalized stresses, which are expressed by a hydrostatic σ and an octahedral tangential τ . The author assumes the following: the body is isotropic, the principal directions of the stresses and of the deformations coincide, the phases of the true stresses of the logarithmic elongations are equal to one another and the intensity of the deformations is a unique function known from experiments of the octahedral tangential stresses only. Then the equations for the equilibrium in the absence of mass forces are satisfied by the introduction of a stress function. The equation of this problem resulting under these assumptions is written down explicitly, it is, by the way, comparatively long. At a transition to the relations of classical elasticity theory this equation reduces to a biharmonic equation. Finally a boundary condition is deduced, and the special case of final dimensions in non-ferrous metals is also taken into consideration. It is eventually possible to represent the solution of the problem by a series expansion with respect to a small parameter μ :

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Plane Deformation of an Incompressible Material

20-119-6-19/56

$U = U^{(0)} + \mu U^{(1)} + \mu^2 U^{(2)} + \dots$. The determination of $U^{(0)}$ is equivalent to the solution of the classical problem. The computation of each of the subsequent approximations reduces to the solution of problems of the type $\nabla^4 U^{(1)} = -L_1(U^0)$, $dU_{,1}^{(1)}/ds|_{\Gamma} = f_1(U^0)$, $dU_{,2}^{(1)}/ds = f_2(U^0)$. Therefore it is possible to employ successfully the method developed by N. I. Muskhelishvili for the solution of actual problems. There are 4 references, 3 of which are Soviet.

PRESENTED: December 25, 1957, by L. I. Sedov, Member, Academy of Sciences, USSR

SUBMITTED: December 11, 1957

Card 3/3

SOV/24-58-10-12/34

AUTHOR: Tolokonnikov, L. A. (Tula)

TITLE: Critical Pressures on a Circular Plate (Kriticheskiye davleniya na krugluyu plastinku)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, 1958, Nr 10, pp 77-86 (USSR)

ABSTRACT: Axially symmetrical equilibrium states of a circular disc of radius a and thickness h under the action of a uniform pressure (2) on the cylindrical surface are considered. The method of holding the disc in position is illustrated in Fig.1. Experiments show that sufficiently thin plates will bulge if the pressure reaches a certain critical value and the median surface of the disc assumes the form of a surface of revolution. This bulging effect may be prevented by increasing the thickness of the disc. There is a limiting value for the ratio h/a , above which the disc will remain plane at any pressure. On the basis of the classical theory of stability of elastic plates, Dinnik (Ref.1) showed that the ratio h/a is related to the critical pressure by the following formula:

$$\left(\frac{h}{a}\right)^2 = \frac{6(1-\mu)}{d^2} \frac{q}{G}, \quad (1.1)$$

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where μ is Poisson's coefficient, G is the modulus of rigidity, and d is the first non-zero root of the first-order Bessel function. This formula is applicable up to the elastic limit and is based on the small deformation approximation. Various suggestions have been put forward for extending the above formula to the elasto-plastic state. These reduce to a replacement of G by G' , which is a function of pressure and decreases as the pressure increases. Hence, the extension of Eq.(1.1) to the region of elasto-plastic deformations is represented by a monotonic function. Thus, the determination of the limiting ratio h/a , above which the disc is always stable, cannot be carried out within the limits of the theory of small deformations. In the present paper, a general solution is given which is not limited to small deformations. The equilibrium of a continuous body is considered in general. Two possible states are defined, the "fundamental" and the "possible". On the basis of the Lagrange theory, the fundamental state is described by the

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displacements $u_s^0(x_k)$, non-linear deformations e_{mn}^0 and the tensor components of generalised stresses Σ_{mn}^0 . The non-linear components of the deformation tensor are represented as sums of linear e_{mn}^0 and non-linear Θ_{mn}^0 parts:

$$e_{mn}^0 = \varepsilon_{mn}^0 + \Theta_{mn}^0, \quad 2\varepsilon_{mn}^0 = \frac{\partial u_m^0}{\partial x_n} + \frac{\partial u_n^0}{\partial x_m},$$

$$2\Theta_{mn}^0 = \frac{\partial u_s^0}{\partial x_m} \frac{\partial u_s^0}{\partial x_n} \quad (2.1)$$

It can be shown that the generalised stresses corresponding to the deformation coordinates e_{mn}^0 are given by:

$$\Sigma_{mn}^0 = \frac{s_m^0 s_n^0}{1 + \Delta^0} \sigma_{mn}^0 \quad (2.2)$$

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where Δ^0 is the relative change in the volume element of the body on deformation, s_k^0 is the ratio of areas of coordinate area elements in the deformed and natural states and σ_{mn}^0 are the contravariant components of the tensor of true stresses relative to the triad of coordinate lines in the deformed state. If the points of the body are given the displacements $u_k = \tilde{u}_k - u_k^0$, then the body goes from the fundamental to the possible equilibrium state. The changes in the generalised stresses are then $\Sigma_{mn} = \tilde{\Sigma}_{mn} - \Sigma_{mn}^0$ and from the displacements u_k and formulae (2,1), the quantities e_{mn} may be calculated. The equation of equilibrium for the fundamental state is: .

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Critical Pressures on a Circular Plate

$$\int_{(T)} \sum_{mn}^{\circ} \delta e_{mn}^{\circ} d\tau = \int_{(T)} \rho X_i^{\circ} \delta u_i^{\circ} d\tau + \int_{(S)} X_{vi}^{\circ} \delta u_i^{\circ} ds, \quad (2.3)$$

where ρ is the density, X_i° and X_{vi}° are the projections of volume and surface forces per unit volume or unit surface in the natural state. The integration is carried out over the volume of the body or its surface in the natural state. An analogous equation may be written down for the parameters of the statically possible state. In view of Eq.(2.3), the variational equation of equilibrium for the possible state may be written in the form:

$$\int_{(T)} \sum_{mn} \delta \varepsilon_{mn} d\tau + \int_{(T)} \sum_{mn}^{\circ} \delta \varepsilon_{mn}^{\circ} d\tau + \frac{1}{2} \int_{(T)} \sum_{mn} \left(\frac{\partial u_s^{\circ}}{\partial x_m} \frac{\partial \delta u_s}{\partial x_n} + \right.$$

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Critical Pressures on a Circular Plate

$$\left(\frac{\partial u_s}{\partial x_n} + \frac{\partial \delta u_s}{\partial x_m} \right) dr = 0 \quad (2.4)$$

The first term on the left-hand side of this equation is the work done by stresses of linear parts of the deformation and the second term is the work done by the stresses of the fundamental state on non-linear parts of the deformation. The third term represents additional work by the stresses. On the basis of this formalism, the following are treated:

- 1) the fundamental equilibrium state of the disc,
- 2) the relation between the stresses and the deformation,
- 3) the relation between the stresses and the deformation resulting on loss of stability,
- 4) displacements and deformations on loss of stability,
- 5) bulging of the disc from the elastic state,
- 6) critical pressures with elasto-plastic deformations.

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Critical Pressures on a Circular Plate

Fig.2 shows the plot of $(h/a)^2$ as a function of q/G . According to Dinnik's formula (Eq.1.1), this plot should be a straight line. In fact, according to the present calculations, one obtains a curve which rises up to a maximum and then turns over. The corresponding relation now derived for h/a as a function of the critical pressure is given by Eq.(8.2). In the case of elasto-plastic deformations, the corresponding curve is shown in Fig.4. Up to a certain value the curve follows the same law as that in Fig.2 (Eq.8.2). Above that value Eq.(9.14) has to be employed. There are 4 figures and 5 Soviet references.

SUBMITTED: November 9, 1956.

Card 7/7

TOLOKONNIKOV, L.A.

Plane deformation of an incompressible material. Dokl. AN SSSR 119
no.6:1124-1126 Ap '58. (MIRA 11:6)

1. Predstavleno akademikom L.I. Sedovym.
(Deformations (Mechanics))

AUTHOR: Tolokonnikov, L.A.; (Tula) 40-21-6-10/13
TITLE: Theory of Elasticity/ the Non-Linear Strength Mechanics of
Displacements (Uravneniya nelineynoy teorii uprugosti v
peremeshcheniyakh)
PERIODICAL: Prikladnaya Matematika i Mekhanika, 1957, Vol 21, Nr 6,
pp 815-822 (USSR)
ABSTRACT: By application of the deformation parameters which are com-
posed of the derivatives of the single displacements into
the directions of the coordinates, the author derives the
basic equations of elasticity theory. He shows that, if the
main deformations are known, the state of deformation of the
body depends on three algebraic invariants derived from the
deformation parameters. For the value of these invariants
conclusions can be drawn from experiments. Their calculation
can be carried out by application of the condition for the
existence of a potential of the internal forces. The analy-
tic form, however, essentially depends on the choice of the
independent coordinates of deformation. Now experiments show
that the volume deformation mainly depends on the hydrosta-
tic pressure. The state of stress, however, essentially de-

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in
Theory of ~~Electricity~~ the Non-Linear Strength Mechanics of Displacements 40-21-6-10/18

pendes on the state of deformation. This fact can be applied to a uniformization of the analytic representation. It is shown that these considerations can be essentially maintained, if the considered material is incompressible and, if the state of the body is given in each point by the coordinates of the deformation and by the hydrostatic stress. There are 7 references, 6 of which are Soviet and 1 American.

SUBMITTED: February 13, 1957

AVAILABLE: Library of Congress

1. Elasticity-Theory

Card 2/2

TOLOKONNIKOV, L.S.

Exhibition of the works of the All-Union Research Institute of
Medical Instruments and Equipment. Sov. zdrav. 20 no.8:90 '61.
(MIRA 15:1)
(MEDICAL INSTRUMENTS AND APPARATUS...EXHIBITIONS)

TOLOKONNIKOV, Leonid Stepanovich; TSishevskiy, V.P., red.; VORONIN, K.P.,
tekhn. red.

[Calculation and design of electric furnace components]. Raschet i
konstruirovaniye mekhanizmov elektricheskikh pechei. Moskva, Gos.
energ. izd-vo 1961. 238 p. (MIRA 14:8)
(Electric furnaces)

8(0)

PHASE I BOOK EXPLOITATION

SOV/2347

Tolokonnikov, Leonid Stepanovich, Mikhail Mikhaylovich Sokolov, Abram Solomonovich Sandler, Vladimir Ivanovich Klyuchev, Yevgeniye Petrovich Ivanov, and Yevgeniy Nikolayevich Zimin

Atlas elektromekhanicheskikh promyshlennykh ustanovok, ch. 1. Elektroprivod i peredatochnyye mekhanizmy (Atlas of Electromechanical Industrial Installations, Pt. 1. Electric Drive and Transmission Mechanisms) Moscow, Gosenergoizdat, 1958. 140 p. 6,500 copies printed.

Chief Ed.: M.G. Chilikin; Eds. (Title page): A.T. Golovan and Leonid Stepanovich Tolokonnikov; Ed. (Inside book): A.L. Saparova; Tech. Ed.: N.I. Borunov.

PURPOSE: The atlas is intended as a manual for students working on machine parts projects and on term and diploma projects related to electrical equipment for drives.

COVERAGE: The atlas presents electromechanical installations for driving, hoisting, and transporting mechanisms (cranes, excavators, hoists, conveyers), rolling mills (continuous rolling mills), metal forming equipment, metal-cutting machine tools and automatic transfer lines. Drawings of general views of mechanisms and drives with the distribution of electrical equipment, elementary circuits and

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Atlas of Electromechanical Industrial Installations (Cont.) SOV/2347

wiring diagrams with the necessary explanations are presented. The mechanical and electrical parts of every mechanism or device are closely related in the manual to enable joint treatment of the subject and to improve the level of preparation for design. In compiling the atlas most recent design material of the following institutions was used: scientific research institutes VNIPTMASH, TsKB "Elektroprivod," TsNIITMASH, NIIProd mash, PKO "Soyuzprommekhanizatsiya," GPI, Tyazhpromelektroproyekt, Institutes MEI and MISI; and Plants "Dinamo" and "Pod'yemnik." No personalities are mentioned. There are 28 references, all Soviet.

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Atlas of Electromechanical Industrial Installations (Cont.)

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Electric equipment for machine tools	Sheets 129-137
Accessories for mounting electrical equipment in machine tools	Sheets 138-140

AVAILABLE: Library of Congress (TJ 240. A8)

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Card 4/4

TOLOKONNIKOV, Leonid Stepanovich; KATSEVICH, Leonid Savvich; NEKRASOVA,
Mina Mikhaylovna; IVANOV, Yevgeniy Petrovich; CHILIKIN, M.G.,
glavnyy red.; SVENCHANSKIY, A.D., red.; SAPAROVA, A.L., red.;
BORUNOV, N.I., tekhn.red.

[Atlas of electromechanical industrial installations] Atlas
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